

## EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	42	"5803914"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/04/08 18:18
S2	841	heart and contrast and (LV or (left near ventricle)) and endocardial and epicardial	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/04/09 14:24
S3	395	heart and contrast and (LV or (left near ventricle)) and endocardial and epicardial and image\$2	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/04/09 14:24
S4	76	heart and contrast and (LV or (left near ventricle)) and endocardial and epicardial and image\$2 and (divid\$3 or partition\$3 or section\$3) near5 image\$2	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/04/09 14:26
S5	71	heart and contrast and (LV or (left near ventricle)) and endocardial and epicardial and image\$2 and myocardium and (divid\$3 or partition\$3 or section\$3) near5 image\$2	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/04/09 14:31
S6	27	heart and ((contrast or color\$3) near (differ\$4 or compar\$4)) and (LV or (left near ventricle)) and endocardial and epicardial and image\$2 and myocardium and (divid\$3 or partition\$3 or section\$3) near5 image\$2	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/04/09 14:52
S7	48	heart and ((contrast or color\$3) near (differ\$4 or compar\$4)) and (LV or (left near ventricle)) and endocardial and epicardial and image\$2 and myocardium and tissue\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/04/09 14:52
S8	2	"20020131628"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/04/09 17:42

## EAST Search History (Prior Art)

S9	1	"10800433"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/19 22:00
S10	1691	patch\$3 and sutur\$3 and valve\$2 and shap\$3 and ring	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/19 22:10
S11	1401	patch\$3 and sutur\$3 and valve\$2 and shap\$3 and ring and heart\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/19 22:10
S12	883	patch\$3 and sutur\$3 and valve\$2 and shap\$3 and ring and heart\$3 and balloon	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/19 22:11
S13	898	patch\$3 and sutur\$3 and valve\$2 and shap\$3 and ring and heart\$3 and balloon\$2	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/19 22:11
S14	69	patch\$3 and sutur\$3 and valve\$2 and shap\$3 and ring and heart\$3 and balloon\$2 and cad	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/19 22:11

# EAST Search History (Prior Art)

S15	118	("20010012913"   "20010029333"   "20010031919"   "20010036245"   "20020016541"   "20020031204"   "20020032377"   "20020035321"   "20020042566"   "20020070970"   "20020077540"   "20020077541"   "20020082498"   "20020087075"   "20020095313"   "20020127523"   "20020167533"   "20030000535"   "20030018251"   "20030038802"   "20030069494"   "20030078494"   "20030095697"   "20030114750"   "20030187362"   "20040049115"   "20040049116"   "20040153128"   "20040176678"   "20040176679"   "20050043609"   "4436684"   "5072384"   "5151856"   "5235510"   "5239591"   "5273038"   "5319551"   "5360006"   "5375156"   "5433199"   "5435310"   "5450850"   "5509084"   "5533085"   "5559901"   "5570430"   "5601084"   "5633951"   "5684398"   "5687737"   "5704791"   "5734739"   "5755577"   "5757877"   "5779634"   "5791908"   "5800177"   "5800178"   "5807256"   "5817022"   "5839440"   "5889524"   "5892515"   "5902239"   "5920660"   "5923770"   "5947899"   "5954648"   "5963211"   "6024705"   "6045512"   "6047090"   "6106466"   "6185447"   "6190320"   "6201165"   "6205349"   "6205411"   "6230048"   "6241699"   "6268730"   "6298112"   "6315735"   "6346940"   "6366684"   "6373920"   "6415048"   "6421565"   "6438403"   "6442417"   "6445183"   "6447453"   "6447454"   "6454712"   "6454776"   "6468218"   "6470070"   "6473488"   "6473634"   "6482146"   "6487432"   "6493571"   "6496560"   "6510337"   "6522324"   "6526307"   "6535623"   "6545678"   "6557558"   "6559641"   "6563941"   "6573717"   "6574304".PN. OR ("6587541"   "6608916"   "6608917"   "6628743").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2008/10/19 22:15
S16	451	patch\$3 and sutur\$3 and valve\$2 and shap\$3 and ring and heart\$3 and balloon\$2 and image\$2	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/19 22:34

## EAST Search History (Prior Art)

S17	167040	patch\$3 and sutur\$3 and valve\$2 and shap\$3 and ring and heart\$3 and balloon\$2 and image\$2 reconstruct\$5	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/19 22:35
S18	184	patch\$3 and sutur\$3 and valve\$2 and shap\$3 and ring and heart\$3 and balloon\$2 and image\$2 and reconstruct\$5	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/19 22:35
S19	12	implant near image\$2 and heart	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/19 22:47
S20	239	implant near4 (image\$2 or pattern\$2) and heart	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/19 22:47
S21	19	(generat\$4 or creat\$4 or develop\$4 or graph\$4 or sketch\$3) near4 implant near4 (image\$2 or pattern\$2) and heart	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/19 22:48
S22	22	(generat\$4 or creat\$4 or develop\$4 or graph\$4 or sketch\$3 or design\$3 or craft\$3 or reconstruct\$4 or construct\$3) near4 implant near4 (image\$2 or pattern\$2) and heart	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/19 22:58
S23	107	(generat\$4 or creat\$4 or develop\$4 or graph\$4 or sketch\$3 or design\$3 or craft\$3 or reconstruct\$4 or construct\$3) near4 implant same (image\$2 or pattern\$2) and heart	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/19 22:58
S24	1478	(generat\$4 or creat\$4 or develop\$4 or graph\$4 or sketch\$3 or design\$3 or craft\$3 or reconstruct\$4 or construct\$3) near4 (implant\$3 or patch\$3 or annuloplasty or suture\$3 or balloon\$2 or shaper\$3 or guid\$3) same (image\$2 or pattern\$2) and heart	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/19 23:03

## EAST Search History (Prior Art)

S25	445	(generat\$4 or creat\$4 or develop\$4 or graph\$4 or sketch\$3 or design\$3 or craft\$3 or reconstruct\$4 or construct\$3) near (implant\$3 or patch\$3 or annuloplasty or suture\$3 or balloon\$2 or shaper\$3 or guid\$3) same (image\$2 or pattern\$2) and heart	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/19 23:04
S26	83	(generat\$4 or creat\$4 or develop\$4 or graph\$4 or sketch\$3 or design\$3 or craft\$3 or reconstruct\$4 or construct\$3) same patient near (implant\$3 or patch\$3 or annuloplasty or suture\$3 or balloon\$2 or shaper\$3 or guid\$3) same (image\$2 or pattern\$2) and heart	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/19 23:22
S27	14	"6345200"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/19 23:34
S28	1	("5709711").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2008/10/19 23:35
S29	19	patient same specific same simulation same heart same model\$2	US-PGPUB; USPAT; USOCR	OR	OFF	2008/10/20 00:35
S30	3	patient same specific same implant\$2 and simulation same heart same model\$2	US-PGPUB; USPAT; USOCR	OR	OFF	2008/10/20 00:41
S31	70	implant\$2 and simulation same heart same model\$2	US-PGPUB; USPAT; USOCR	OR	OFF	2008/10/20 00:41
S32	55	simulation same heart near model\$2	US-PGPUB; USPAT; USOCR	OR	OFF	2008/10/20 00:51
S33	101	simulat\$4 same heart near model\$2	US-PGPUB; USPAT; USOCR	OR	OFF	2008/10/20 01:28
S34	28	simulat\$4 and implant\$4 same heart near model\$2	US-PGPUB; USPAT; USOCR	OR	OFF	2008/10/20 01:29
S35	3920	computer\$5 near aid\$3 near4 (design\$4 or reconstruct\$4 or construct\$3) and (implant\$3 or patch\$3 or annuloplast\$4 or valve\$2 or shaper\$3 or balloon)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/20 14:23

# EAST Search History (Prior Art)

S36	385	computer\$5 near aid\$3 near4 (design\$4 or reconstruct\$4 or construct\$3) same(implant\$3 or patch\$3 or annuloplast\$4 or valve\$2 or shaper\$3 or balloon)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/20 14:24
S37	44	computer\$5 near aid\$3 near4 (design\$4 or reconstruct\$4 or construct\$3) same(implant\$3 or patch\$3 or annuloplast\$4 or valve\$2 or shaper\$3 or balloon) and (cardiac or heart)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/20 14:25
S38	5	("20020119177"   "20030113301"   "20030180266"   "3855196"   "6659995").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2008/10/20 14:40
S39	12	("20010033857"   "20020182241"   "5227979"   "5680317"   "5762125"   "6013853"   "6143293"   "6192327"   "6233499"   "6306424"   "6365149"   "6534084").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2008/10/20 14:43
S40	1625	434/262-272.ccls.	US-PGPUB; USPAT; USOCR	OR	OFF	2008/10/20 14:54
S41	480	434/262-272.ccls. and (cardiac or heart)	US-PGPUB; USPAT; USOCR	OR	OFF	2008/10/20 14:55
S42	58	434/262-272.ccls. and (cardiac or heart) and patient near specific	US-PGPUB; USPAT; USOCR	OR	OFF	2008/10/20 14:55
S43	61	434/262-272.ccls. and (cardiac or heart) and patient\$2 near specific	US-PGPUB; USPAT; USOCR	OR	OFF	2008/10/20 14:55
S44	26	("20010047251"   "4918620"   "5099846"   "5155435"   "5208768"   "5297054"   "5298115"   "5487012"   "5522402"   "5552995"   "5683243"   "5704791"   "5741215"   "5754738"   "5768134"   "5771310"   "5797849"   "5824085"   "5871018"   "6038488"   "6106301"   "6112109"   "6205411"   "6315553"   "6327491"   "6463351").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2008/10/20 15:01
S45	13650	703/1-28.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/21 18:39

## EAST Search History (Prior Art)

S46	82459	(heart or cardiac) and (implant\$3 or (medical near (instrument\$3 or device\$2)))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/21 18:49
S47	13650	703/1-28.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/21 18:50
S48	62	S46 and S47	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/21 18:50
S49	1635	customiz\$5 same implant\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/21 19:00
S50	13650	703/1-28.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/21 19:03
S51	1635	customiz\$5 same implant\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/21 19:03
S52	11	S50 and S51	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/21 19:03
S53	0	paladin near medical	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/22 12:42

## EAST Search History (Prior Art)

S54	168	paladin	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/22 12:42
S55	4096	(custom or customiz\$5) same (implant\$3 or (medical near (device\$2 or instrument\$2)))	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/22 12:52
S56	5741	382/128-132.ccls.	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/22 12:52
S57	22	S55 and S56	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/22 12:53
S58	10127	(custom or customiz\$5) same (implant\$3 or (medical near (device\$2 or instrument\$2)) or valve\$2 or stent\$2 or patch\$3 or baloon\$3)	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/22 12:53
S59	34	S56 and S58	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/22 12:54
S60	834	(custom or customiz\$5) near (implant\$3 or (medical near (device\$2 or instrument\$2)) or valve\$2 or stent\$2 or patch\$3 or baloon\$3)	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/22 12:54
S61	122	(custom or customiz\$5) near (implant\$3 or (medical near (device\$2 or instrument\$2)) or valve\$2 or stent\$2 or patch\$3 or baloon\$3) and cardiac	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/22 12:55



## EAST Search History (Prior Art)

S62	219	(custom or customiz\$5) same implant\$3 same ((medical near (device\$2 or instrument\$2)) or valve\$2 or stent\$2 or patch\$3 or baloon\$3) and cardiac	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/22 14:03
S63	286	(custom or customiz\$5) same implant\$3 same ((medical near (device\$2 or instrument\$2)) or valve\$2 or stent\$2 or patch\$3 or baloon\$3) and (cardiac or heart or ventricle\$2 or atria or atrium)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/22 14:25
S64	742	(custom or customiz\$5 or reconstruct\$3) same implant\$3 same ((medical near (device\$2 or instrument\$2)) or valve\$2 or stent\$2 or patch\$3 or baloon\$3) and (cardiac or heart or ventricle\$2 or atria or atrium)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/22 14:25
S65	41	(custom or customiz\$5 or reconstruct\$3) same implant\$3 same ((medical near (device\$2 or instrument\$2)) or valve\$2 or stent\$2 or patch\$3 or baloon\$3) and simulation and (cardiac or heart or ventricle\$2 or atria or atrium)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/22 14:26
S66	30	(custom or customiz\$5 or reconstruct\$3) same implant\$3 same ((medical near (device\$2 or instrument\$2)) or valve\$2 or stent\$2 or patch\$3 or baloon\$3) and simulation same (cardiac or heart or ventricle\$2 or atria or atrium)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/22 14:27
S67	128	helix near medical	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/22 15:42
S68	12	jarvick	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/22 15:51
S69	1326	jarvik	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/22 15:56

## EAST Search History (Prior Art)

S70	710	jarvik and heart	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/22 15:56
S71	10127	(custom or customiz\$5) same (implant\$3 or (medical near (device\$2 or instrument\$2)) or valve\$2 or stent\$2 or patch\$3 or baloon\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/22 15:56
S72	26	S69 and S71	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/22 15:56
S73	3460	(design\$3 or manufactur\$3) same (custom or customiz\$5) same (implant\$3 or (medical near (device\$2 or instrument\$2)) or valve\$2 or stent\$2 or patch\$3 or baloon\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/22 16:05
S74	668	(design\$3 or manufactur\$3) same (custom or customiz\$5) same patient\$2 same specific\$2	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/22 16:05
S75	5741	382/128-132.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/22 16:07
S76	6	S74 and S75	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/22 16:07
S77	356	(design\$3 or manufactur\$3) same (custom or customiz\$5) same patient\$2 near4 specific\$2	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/22 16:08

# EAST Search History (Prior Art)

S78	117	623/1.26.ccls.	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/22 16:33
S79	3363	(design\$3 or manufactur\$3) same patient\$2 near4 specific\$2	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/22 17:16
S80	5741	382/128-132.ccls.	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/22 17:17
S81	27	S79 and S80	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/22 17:17
S82	1213	623/900-904.ccls.	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/22 17:27
S83	5741	382/128-132.ccls.	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/22 17:28
S84	2	S82 and S83	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/22 17:28
S85	3363	(design\$3 or manufactur\$3) same patient\$2 near4 specific\$2	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/22 17:28

# EAST Search History (Prior Art)

S86	13		S82 and S85	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/22 17:28
S87	24	("4097935"   "4436684"   "4575805"   "4822365"   "4936862"   "4976737"   "5360446"   "5365996"   "5370692"   "5432703"   "5448489"   "5452407"   "5554190"   "5687305"   "5741215"   "5765561"   "5769092"   "5798924"   "5824085"   "5824111"   "6112109"   "6254639"   "6334853"   "6463351").PN.	S83 and S85	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/22 17:37
S88	27		S83 and S85	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/22 17:44
S89	55	("4286852"   "4294544"   "4508452"   "4575805"   "4616121"   "4745469"   "4837732"   "4935635"   "5011405"   "5027281"   "5028799"   "5098426"   "5131844"   "5214686"   "5238404"   "5243665"   "5347454"   "5368478"   "5395238"   "5424836"   "5431562"   "5447432"   "5454717"   "5456600"   "5464349"   "5474448"   "5513276"   "5518397"   "5533895"   "5542842"   "5604817"   "5618176"   "5715166"   "5724435"   "5742294"   "5823778"   "5848115"   "5880961"   "5886775"   "5985495"   "5988862"   "5991437"   "6088695"   "6100862"   "6100893"   "6124934"   "6139499"   "6167151"   "6201546"   "6205716"   "6211506"   "6217334"   "6227850"   "6253164"   "RE35816").PN.	S83 and S85	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/22 17:47
S90	3921	computer\$5 near aid\$3 near4 (design\$4 or reconstruct\$4 or construct\$3) and (implant\$3 or patch\$3 or annuloplast\$4 or valve\$2 or shaper\$3 or balloon)	S83 and S85	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/22 17:55
S91	31		S83 and S90	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/22 17:55

## EAST Search History (Prior Art)

S92	207	implant\$3 same ((medical near (device\$2 or instrument\$2)) or valve\$2 or stent\$2 or patch\$3 or balloon\$3) and simulation same (cardiac or heart or ventricle\$2 or atria or atrium)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/22 17:58
S93	782	(implant\$3 or (medical near (device\$2 or instrument\$2)) or valve\$2 or stent\$2 or patch\$3 or balloon\$3) and simulation same (cardiac or heart or ventricle\$2 or atria or atrium)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/22 18:01
S94	9	S83 and S93	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/22 18:02
S95	61142	(implant\$3 or (medical near (device\$2 or instrument\$2)) or valve\$2 or stent\$2 or patch\$3 or balloon\$3) same (cardiac or heart or ventricle\$2 or atria or atrium)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/22 18:08
S96	5741	382/128-132.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/22 18:09
S97	149	S95 and S96	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/22 18:09
S98	2	"20030023266"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/22 19:03
S99	6	"09428008"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/22 19:05

## EAST Search History (Prior Art)

S10 0	4	"10094730"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/22 19:07
S10 1	35799	378/1-210.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/23 12:16
S10 2	1409	patch\$3 and sutur\$3 and valve\$2 and shap\$3 and ring and heart\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/23 12:17
S10 3	2	S101 and S102	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/23 12:17
S10 4	13	implant near image\$2 and heart	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/23 12:18
S10 5	0	S101 and S104	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/23 12:18
S10 6	21385	(generat\$4 or creat\$4 or develop\$4 or graph\$4 or sketch\$3 or design\$3 or craft\$3 or reconstruct\$4 or construct\$3) near\$4 (implant\$3 or patch\$3 or annuloplasty or suture\$3 or balloon\$2 or shaper\$3 or guid\$3) same (image\$2 or pattern\$2)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/23 12:18
S10 7	200	S101 and S106	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/23 12:19

## EAST Search History (Prior Art)

S10 8	8155	(generat\$4 or creat\$4 or develop\$4 or graph\$4 or sketch\$3 or design\$3 or craft\$3 or reconstruct\$4 or construct\$3) near4 (implant\$3 or patch\$3 or annuloplasty or suture\$3 or balloon\$2 or shaper\$3) same (image\$2 or pattern\$2)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/23 12:19
S10 9	66	S101 and S108	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/23 12:20
S11 0	2	"09828504"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/23 14:39
S11 1	2	"20020007294"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/23 14:43
S11 2	2	"20070150052"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/24 11:37
S11 3	44	albert near4 santilli	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/24 11:38
S11 4	37	"5326371"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/24 11:51
S11 5	393	prosthetic\$2 same heart same valves and (xray or MRI or CT)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/24 12:33

## EAST Search History (Prior Art)

S11 6	548	prosthetic\$2 same heart same (valve\$2 or implant\$3) and (xray or MRI or CT)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/24 12:34
S11 7	37	prosthetic\$2 same heart same (valve\$2 or implant\$3) and (xray or MRI or CT) and CAD	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/24 12:35
S11 8	449	prosthetic\$2 same heart same (valve\$2 or implant\$3) and (xray or MRI or CT) and design\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/24 12:36
S11 9	251	prosthetic\$2 same heart same (valve\$2 or implant\$3) and (xray or MRI or CT) and design\$3 and imag\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/24 13:54
S12 0	2606	james near4 anderson	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/24 14:33
S12 1	152	james near4 anderson and medical	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/24 14:33
S12 2	92	james near4 anderson and medical and patient	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/24 14:34
S12 3	687	(design\$3 or manufactur\$3 or simulat\$3) same (heart or cardiac or ventric\$5 or atri\$5) same (valve\$2 or implant\$3) and (xray or MRI or CT) and design\$3 and imag\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/24 14:34
S12 4	12	("20010033857"   "20020182241"   "5227979"   "5680317"   "5762125"   "6013853"   "6143293"   "6192327"   "6233499"   "6306424"   "6365149"   "6534084").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2008/10/24 15:14



## EAST Search History (Prior Art)

S12 5	8	3di near2 gmbh	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/24 15:41
S12 6	694033	((mri or (magnetic near resonance)) or (CT or (computed near tomograph\$4)))	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/24 21:15
S12 7	140534	((mri or (magnetic near resonance)) or (CT or (computed near tomograph\$4))) and image\$3	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/24 21:15
S12 8	8155	(generat\$4 or creat\$4 or develop\$4 or graph\$4 or sketch\$3 or design\$3 or craft\$3 or reconstruct\$4 or construct\$3) near4 (implant\$3 or patch\$3 or annuloplasty or suture\$3 or balloon\$2 or shaper\$3) same (image\$2 or pattern\$2)	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/24 21:15
S12 9	1189	S127 and S128	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/24 21:15
S13 0	109916	(generat\$4 or creat\$4 or develop\$4 or graph\$4 or sketch\$3 or design\$3 or craft\$3 or reconstruct\$4 or construct\$3 or manufactur\$3) near (implant\$3 or patch\$3 or annuloplasty or suture\$3 or balloon\$2 or shaper\$3 or valve\$3)	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/24 21:17
S13 1	2536	S127 and S130	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/24 21:17
S13 2	2974	(generat\$4 or creat\$4 or develop\$4 or graph\$4 or sketch\$3 or design\$3 or craft\$3 or reconstruct\$4 or construct\$3 or manufactur\$3) near (implant\$3 or patch\$3 or annuloplasty or suture\$3 or balloon\$2 or shaper\$3 or valve\$3) same (cardiac or heart or atri\$3 or ventricle\$2 or aort\$3)	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/24 21:21

### EAST Search History (Prior Art)

S13 3	237	S127 and S132	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/24 21:22
----------	-----	---------------	---	----	-----	------------------

# EAST Search History (Prior Art)

S13 4	181	("20010007956"   "20020082689"   "20020095116"   "20020123802"   "20020151970"   "20020183838"   "20020183841"   "20030023300"   "20030023303"   "20030036795"   "20030055496"   "20030078654"   "20030083538"   "20030130730"   "20030130731"   "20030191527"   "20030220684"   "20030225453"   "20030233022"   "20040003819"   "20040030381"   "20040030382"   "20040034320"   "20040039442"   "20040093060"   "20040127979"   "20040148019"   "20040148020"   "20040167620"   "20040186563"   "20040210304"   "20040225354"   "20040249413"   "20040249452"   "20040254600"   "20040260322"   "20040260390"   "20050010285"   "20050021056"   "20050021057"   "20050033446"   "20050055082"   "20050065550"   "20050107810"   "20050137686"   "20050137687"   "20050137688"   "20050137689"   "20050137690"   "20050137691"   "20050137695"   "20050137696"   "20050137699"   "20050137701"   "20050203549"   "20050203614"   "20050209674"   "20050222488"   "20050222489"   "20050228422"   "20050267574"   "20050273160"   "20060004442"   "20060020327"   "20060020332"   "20060020333"   "20060020334"   "20060025750"   "20060025787"   "20060025854"   "20060025855"   "20060041306"   "20060063970"   "20060074485"   "20060100699"   "20060106449"   "20060106450"   "20060129025"   "20060129051"   "20060129235"   "20060149135"   "20060178700"   "20060190030"   "20060229717"   "20060235512"   "20060241656"   "20060252984"   "20060271172"   "20070005133"   "20070027536"   "20070038293"   "20070043435"   "20070050022") .PN. OR ("20070185566" "20080015687"   "20080109073" "3416562"   "3657744"   "3671979" "3714671"   "4035849"   "4056854" "4183102"   "4339831"   "4592340" "4612011"   "4662885"   "4727873" "4787899"   "4817600"   "4892541" "4960424"   "4994077"   "5026383" "5032128"   "5163897"   "5163953" "5207695"   "5360444"   "5370685" "5370691"   "5397351"   "54111552" "5423851"   "5443499"   "5449385" "5500016"   "5554185"   "5649979" "5690570"   "5840081"   "5848964" "5849641"	US-PGPUB; OR USPAT; USOCR	OFF	2008/10/25 09:21
----------	-----	---	---------------------------------	-----	------------------

## EAST Search History (Prior Art)

S13 5	140534	((mri or (magnetic near resonance)) or (CT or (computed near tomograph\$4)))) and image\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/25 09:25
S13 6	14	S134 and S135	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/25 09:25
S13 7	2	"7333643"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/25 09:29
S13 8	44	"5151856"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/25 10:16
S13 9	2	("20020007294").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/25 18:22
S14 0	24	"5612885"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/26 09:29
S14 1	273	heart same valve\$2 near4 size\$2 and shape\$3 and (xray or MRI or CT or cardiogram\$3 or ultrasound\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/26 11:20
S14 2	33	"6893392"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/27 11:21

## EAST Search History (Prior Art)

S14 3	1	"10800433"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/10/28 02:23
S14 4	47	"5803914"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S14 5	908	heart and contrast and (LV or (left near ventricle)) and endocardial and epicardial	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S14 6	426	heart and contrast and (LV or (left near ventricle)) and endocardial and epicardial and image\$2	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S14 7	81	heart and contrast and (LV or (left near ventricle)) and endocardial and epicardial and image\$2 and (divid\$3 or partition\$3 or section\$3) near5 image\$2	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S14 8	75	heart and contrast and (LV or (left near ventricle)) and endocardial and epicardial and image\$2 and myocardium and (divid\$3 or partition\$3 or section\$3) near5 image\$2	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S14 9	28	heart and ((contrast or color\$3) near (differ\$4 or compar\$4)) and (LV or (left near ventricle)) and endocardial and epicardial and image\$2 and myocardium and (divid\$3 or partition\$3 or section\$3) near5 image\$2	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S15 0	50	heart and ((contrast or color\$3) near (differ\$4 or compar\$4)) and (LV or (left near ventricle)) and endocardial and epicardial and image\$2 and myocardium and tissue\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00

## EAST Search History (Prior Art)

S15 1	2	"20020131628"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S15 2	1	"10800433"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S15 3	1728	patch\$3 and sutur\$3 and valve\$2 and shap\$3 and ring	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S15 4	1431	patch\$3 and sutur\$3 and valve\$2 and shap\$3 and ring and heart\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S15 5	903	patch\$3 and sutur\$3 and valve\$2 and shap\$3 and ring and heart\$3 and balloon	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S15 6	919	patch\$3 and sutur\$3 and valve\$2 and shap\$3 and ring and heart\$3 and balloon\$2	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S15 7	70	patch\$3 and sutur\$3 and valve\$2 and shap\$3 and ring and heart\$3 and balloon\$2 and cad	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00

# EAST Search History (Prior Art)

S15 8	118	("20010012913"   "20010029333"   "20010031919"   "20010036245"   "20020016541"   "20020031204"   "20020032377"   "20020035321"   "20020042566"   "20020070970"   "20020077540"   "20020077541"   "20020082498"   "20020087075"   "20020095313"   "20020127523"   "20020167533"   "20030000535"   "20030018251"   "20030038802"   "20030069494"   "20030078494"   "20030095697"   "20030114750"   "20030187362"   "20040049115"   "20040049116"   "20040153128"   "20040176678"   "20040176679"   "20050043609"   "4436684"   "5072384"   "5151856"   "5235510"   "5239591"   "5273038"   "5319551"   "5360006"   "5375156"   "5433199"   "5435310"   "5450850"   "5509084"   "5533085"   "5559901"   "5570430"   "5601084"   "5633951"   "5684398"   "5687737"   "5704791"   "5734739"   "5755577"   "5757877"   "5779634"   "5791908"   "5800177"   "5800178"   "5807256"   "5817022"   "5839440"   "5889524"   "5892515"   "5902239"   "5920660"   "5923770"   "5947899"   "5954648"   "5963211"   "6024705"   "6045512"   "6047090"   "6106466"   "6185447"   "6190320"   "6201165"   "6205349"   "6205411"   "6230048"   "6241699"   "6268730"   "6298112"   "6315735"   "6346940"   "6366684"   "6373920"   "6415048"   "6421565"   "6438403"   "6442417"   "6445183"   "6447453"   "6447454"   "6454712"   "6454776"   "6468218"   "6470070"   "6473488"   "6473634"   "6482146"   "6487432"   "6493571"   "6496560"   "6510337"   "6522324"   "6526307"   "6535623"   "6545678"   "6557558"   "6559641"   "6563941"   "6573717"   "6574304".PN. OR ("6587541"   "6608916"   "6608917"   "6628743").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2008/12/08 04:00
S15 9	459	patch\$3 and sutur\$3 and valve\$2 and shap\$3 and ring and heart\$3 and balloon\$2 and image\$2	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00

## EAST Search History (Prior Art)

S16 0	169899	patch\$3 and sutur\$3 and valve\$2 and shap\$3 and ring and heart\$3 and balloon\$2 and image\$2 reconstruct\$5	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S16 1	184	patch\$3 and sutur\$3 and valve\$2 and shap\$3 and ring and heart\$3 and balloon\$2 and image\$2 and reconstruct\$5	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S16 2	15	implant near image\$2 and heart	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S16 3	250	implant near4 (image\$2 or pattern\$2) and heart	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S16 4	19	(generat\$4 or creat\$4 or develop\$4 or graph\$4 or sketch\$3) near4 implant near4 (image\$2 or pattern\$2) and heart	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S16 5	22	(generat\$4 or creat\$4 or develop\$4 or graph\$4 or sketch\$3 or design\$3 or craft\$3 or reconstruct\$4 or construct\$3) near4 implant near4 (image\$2 or pattern\$2) and heart	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S16 6	110	(generat\$4 or creat\$4 or develop\$4 or graph\$4 or sketch\$3 or design\$3 or craft\$3 or reconstruct\$4 or construct\$3) near4 implant same (image\$2 or pattern\$2) and heart	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S16 7	1518	(generat\$4 or creat\$4 or develop\$4 or graph\$4 or sketch\$3 or design\$3 or craft\$3 or reconstruct\$4 or construct\$3) near4 (implant\$3 or patch\$3 or annuloplasty or suture\$3 or balloon\$2 or shaper\$3 or guid\$3) same (image\$2 or pattern\$2) and heart	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00



## EAST Search History (Prior Art)

S16 8	452	(generat\$4 or creat\$4 or develop\$4 or graph\$4 or sketch\$3 or design\$3 or craft\$3 or reconstruct\$4 or construct\$3) near (implant\$3 or patch\$3 or annuloplasty or suture\$3 or balloon\$2 or shaper\$3 or guid\$3) same (image\$2 or pattern\$2) and heart	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S16 9	86	(generat\$4 or creat\$4 or develop\$4 or graph\$4 or sketch\$3 or design\$3 or craft\$3 or reconstruct\$4 or construct\$3) same patient near (implant\$3 or patch\$3 or annuloplasty or suture\$3 or balloon\$2 or shaper\$3 or guid\$3) same (image\$2 or pattern\$2) and heart	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S17 0	14	"6345200"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S17 1	1	("5709711").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2008/12/08 04:00
S17 2	19	patient same specific same simulation same heart same model\$2	US-PGPUB; USPAT; USOCR	OR	OFF	2008/12/08 04:00
S17 3	3	patient same specific same implant\$2 and simulation same heart same model\$2	US-PGPUB; USPAT; USOCR	OR	OFF	2008/12/08 04:00
S17 4	73	implant\$2 and simulation same heart same model\$2	US-PGPUB; USPAT; USOCR	OR	OFF	2008/12/08 04:00
S17 5	56	simulation same heart near model\$2	US-PGPUB; USPAT; USOCR	OR	OFF	2008/12/08 04:00
S17 6	102	simulat\$4 same heart near model\$2	US-PGPUB; USPAT; USOCR	OR	OFF	2008/12/08 04:00
S17 7	28	simulat\$4 and implant\$4 same heart near model\$2	US-PGPUB; USPAT; USOCR	OR	OFF	2008/12/08 04:00
S17 8	3976	computer\$5 near aid\$3 near\$4 (design\$4 or reconstruct\$4 or construct\$3) and (implant\$3 or patch\$3 or annuloplast\$4 or valve\$2 or shaper\$3 or balloon)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00

## EAST Search History (Prior Art)

S17 9	393	computer\$5 near aid\$3 near4 (design\$4 or reconstruct\$4 or construct\$3) same(implant\$3 or patch\$3 or annuloplast\$4 or valve\$2 or shaper\$3 or balloon)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S18 0	45	computer\$5 near aid\$3 near4 (design\$4 or reconstruct\$4 or construct\$3) same(implant\$3 or patch\$3 or annuloplast\$4 or valve\$2 or shaper\$3 or balloon) and (cardiac or heart)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S18 1	5	("20020119177"   "20030113301"   "20030180266"   "3855196"   "6659995").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2008/12/08 04:00
S18 2	12	("20010033857"   "20020182241"   "5227979"   "5680317"   "5762125"   "6013853"   "6143293"   "6192327"   "6233499"   "6306424"   "6365149"   "6534084").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2008/12/08 04:00
S18 3	1642	434/262-272.ccls.	US-PGPUB; USPAT; USOCR	OR	OFF	2008/12/08 04:00
S18 4	488	434/262-272.ccls. and (cardiac or heart)	US-PGPUB; USPAT; USOCR	OR	OFF	2008/12/08 04:00
S18 5	61	434/262-272.ccls. and (cardiac or heart) and patient near specific	US-PGPUB; USPAT; USOCR	OR	OFF	2008/12/08 04:00
S18 6	64	434/262-272.ccls. and (cardiac or heart) and patient\$2 near specific	US-PGPUB; USPAT; USOCR	OR	OFF	2008/12/08 04:00
S18 7	26	("20010047251"   "4918620"   "5099846"   "5155435"   "5208768"   "5297054"   "5298115"   "5487012"   "5522402"   "5552995"   "5683243"   "5704791"   "5741215"   "5754738"   "5768134"   "5771310"   "5797849"   "5824085"   "5871018"   "6038488"   "6106301"   "6112109"   "6205411"   "6315553"   "6327491"   "6463351").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2008/12/08 04:00
S18 8	13959	703/1-28.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00

## EAST Search History (Prior Art)

S18 9	84115	(heart or cardiac) and (implant\$3 or (medical near (instrument\$3 or device\$2)))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S19 0	13959	703/1-28.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S19 1	66	S189 and S190	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S19 2	1685	customiz\$5 same implant\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S19 3	13959	703/1-28.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S19 4	1685	customiz\$5 same implant\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S19 5	12	S193 and S194	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S19 6	0	paladin near medical	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00

## EAST Search History (Prior Art)

S19 7	174	paladin	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S19 8	4208	(custom or customiz\$5) same (implant\$3 or (medical near (device\$2 or instrument\$2)))	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S19 9	5955	382/128-132.ccls.	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S20 0	23	S198 and S199	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S20 1	10327	(custom or customiz\$5) same (implant\$3 or (medical near (device\$2 or instrument\$2)) or valve\$2 or stent\$2 or patch\$3 or baloon\$3)	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S20 2	35	S199 and S201	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S20 3	853	(custom or customiz\$5) near (implant\$3 or (medical near (device\$2 or instrument\$2)) or valve\$2 or stent\$2 or patch\$3 or baloon\$3)	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S20 4	125	(custom or customiz\$5) near (implant\$3 or (medical near (device\$2 or instrument\$2)) or valve\$2 or stent\$2 or patch\$3 or baloon\$3) and cardiac	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00

## EAST Search History (Prior Art)

S20 5	227	(custom or customiz\$5) same implant\$3 same ((medical near (device\$2 or instrument\$2)) or valve\$2 or stent\$2 or patch\$3 or baloon\$3) and cardiac	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S20 6	295	(custom or customiz\$5) same implant\$3 same ((medical near (device\$2 or instrument\$2)) or valve\$2 or stent\$2 or patch\$3 or baloon\$3) and (cardiac or heart or ventricle\$2 or atria or atrium)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S20 7	761	(custom or customiz\$5 or reconstruct\$3) same implant\$3 same ((medical near (device\$2 or instrument\$2)) or valve\$2 or stent\$2 or patch\$3 or baloon\$3) and (cardiac or heart or ventricle\$2 or atria or atrium)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S20 8	41	(custom or customiz\$5 or reconstruct\$3) same implant\$3 same ((medical near (device\$2 or instrument\$2)) or valve\$2 or stent\$2 or patch\$3 or baloon\$3) and simulation and (cardiac or heart or ventricle\$2 or atria or atrium)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S20 9	30	(custom or customiz\$5 or reconstruct\$3) same implant\$3 same ((medical near (device\$2 or instrument\$2)) or valve\$2 or stent\$2 or patch\$3 or baloon\$3) and simulation same (cardiac or heart or ventricle\$2 or atria or atrium)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S21 0	128	helix near medical	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S21 1	12	jarvick	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S21 2	1336	jarvik	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00

## EAST Search History (Prior Art)

S21 3	715	jarvik and heart	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S21 4	10327	(custom or customiz\$5) same (implant\$3 or (medical near (device\$2 or instrument\$2)) or valve\$2 or stent\$2 or patch\$3 or baloon\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S21 5	28	S212 and S214	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S21 6	3529	(design\$3 or manufactur\$3) same (custom or customiz\$5) same (implant\$3 or (medical near (device\$2 or instrument\$2)) or valve\$2 or stent\$2 or patch\$3 or baloon\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S21 7	684	(design\$3 or manufactur\$3) same (custom or customiz\$5) same patient\$2 same specific\$2	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S21 8	5955	382/128-132.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S21 9	6	S217 and S218	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S22 0	365	(design\$3 or manufactur\$3) same (custom or customiz\$5) same patient\$2 near4 specific\$2	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00

## EAST Search History (Prior Art)

S22 1	120	623/1.26.ccls.	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S22 2	3446	(design\$3 or manufactur\$3) same patient\$2 near4 specific\$2	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S22 3	5955	382/128-132.ccls.	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S22 4	31	S222 and S223	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S22 5	1216	623/900-904.ccls.	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S22 6	5955	382/128-132.ccls.	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S22 7	2	S225 and S226	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S22 8	3446	(design\$3 or manufactur\$3) same patient\$2 near4 specific\$2	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00

# EAST Search History (Prior Art)

S22 9	13		S225 and S228	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S23 0	24	("4097935"   "4436684"   "4575805"   "4822365"   "4936862"   "4976737"   "5360446"   "5365996"   "5370692"   "5432703"   "5448489"   "5452407"   "5554190"   "5687305"   "5741215"   "5765561"   "5769092"   "5798924"   "5824085"   "5824111"   "6112109"   "6254639"   "6334853"   "6463351").PN.		US-PGPUB; USPAT; USOCR	OR	OFF	2008/12/08 04:00
S23 1	31		S226 and S228	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S23 2	55	("4286852"   "4294544"   "4508452"   "4575805"   "4616121"   "4745469"   "4837732"   "4935635"   "5011405"   "5027281"   "5028799"   "5098426"   "5131844"   "5214686"   "5238404"   "5243665"   "5347454"   "5368478"   "5395238"   "5424836"   "5431562"   "5447432"   "5454717"   "5456600"   "5464349"   "5474448"   "5513276"   "5518397"   "5533895"   "5542842"   "5604817"   "5618176"   "5715166"   "5724435"   "5742294"   "5823778"   "5848115"   "5880961"   "5886775"   "5985495"   "5988862"   "5991437"   "6088695"   "6100862"   "6100893"   "6124934"   "6139499"   "6167151"   "6201546"   "6205716"   "6211506"   "6217334"   "6227850"   "6253164"   "RE35816").PN.		US-PGPUB; USPAT; USOCR	OR	OFF	2008/12/08 04:00
S23 3	3976	computer\$5 near aid\$3 near4 (design\$4 or reconstruct\$4 or construct\$3) and (implant\$3 or patch\$3 or annuloplast\$4 or valve\$2 or shaper\$3 or balloon)		US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S23 4	32		S226 and S233	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00



# EAST Search History (Prior Art)

S23 5	212	implant\$3 same ((medical near (device\$2 or instrument\$2)) or valve\$2 or stent\$2 or patch\$3 or balloon\$3) and simulation same (cardiac or heart or ventricle\$2 or atria or atrium)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S23 6	793	(implant\$3 or (medical near (device\$2 or instrument\$2)) or valve\$2 or stent\$2 or patch\$3 or balloon\$3) and simulation same (cardiac or heart or ventricle\$2 or atria or atrium)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S23 7	9	S226 and S236	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S23 8	62301	(implant\$3 or (medical near (device\$2 or instrument\$2)) or valve\$2 or stent\$2 or patch\$3 or balloon\$3) same (cardiac or heart or ventricle\$2 or atria or atrium)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S23 9	5955	382/128-132.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S24 0	161	S238 and S239	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S24 1	2	"20030023266"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S24 2	6	"09428008"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00

## EAST Search History (Prior Art)

S24 3	4	"10094730"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S24 4	36039	378/1-210.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S24 5	1431	patch\$3 and sutur\$3 and valve\$2 and shap\$3 and ring and heart\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S24 6	2	S244 and S245	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S24 7	15	implant near image\$2 and heart	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S24 8	0	S244 and S247	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S24 9	21662	(generat\$4 or creat\$4 or develop\$4 or graph\$4 or sketch\$3 or design\$3 or craft\$3 or reconstruct\$4 or construct\$3) near\$4 (implant\$3 or patch\$3 or annuloplasty or suture\$3 or balloon\$2 or shaper\$3 or guid\$3) same (image\$2 or pattern\$2)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S25 0	206	S244 and S249	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00

## EAST Search History (Prior Art)

S25 1	8274	(generat\$4 or creat\$4 or develop\$4 or graph\$4 or sketch\$3 or design\$3 or craft\$3 or reconstruct\$4 or construct\$3) near4 (implant\$3 or patch\$3 or annuloplasty or suture\$3 or balloon\$2 or shaper\$3) same (image\$2 or pattern\$2)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S25 2	66	S244 and S251	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S25 3	2	"09828504"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S25 4	2	"20020007294"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S25 5	2	"20070150052"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S25 6	46	albert near4 santilli	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S25 7	37	"5326371"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S25 8	395	prosthetic\$2 same heart same valves and (xray or MRI or CT)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00

## EAST Search History (Prior Art)

S25 9	552	prosthetic\$2 same heart same (valve\$2 or implant\$3) and (xray or MRI or CT)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S26 0	37	prosthetic\$2 same heart same (valve\$2 or implant\$3) and (xray or MRI or CT) and CAD	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S26 1	452	prosthetic\$2 same heart same (valve\$2 or implant\$3) and (xray or MRI or CT) and design\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S26 2	254	prosthetic\$2 same heart same (valve\$2 or implant\$3) and (xray or MRI or CT) and design\$3 and imag\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S26 3	2618	james near4 anderson	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S26 4	154	james near4 anderson and medical	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S26 5	94	james near4 anderson and medical and patient	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S26 6	700	(design\$3 or manufactur\$3 or simulat\$3) same (heart or cardiac or ventric\$5 or atri\$5) same (valve\$2 or implant\$3) and (xray or MRI or CT) and design\$3 and imag\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S26 7	12	("20010033857"   "20020182241"   "5227979"   "5680317"   "5762125"   "6013853"   "6143293"   "6192327"   "6233499"   "6306424"   "6365149"   "6534084").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2008/12/08 04:00

## EAST Search History (Prior Art)

S26 8	8	3di near2 gmbh	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S26 9	698968	((mri or (magnetic near resonance)) or (CT or (computed near tomograph\$4))))	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S27 0	142536	((mri or (magnetic near resonance)) or (CT or (computed near tomograph\$4)))) and image\$3	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S27 1	8274	(generat\$4 or creat\$4 or develop\$4 or graph\$4 or sketch\$3 or design\$3 or craft\$3 or reconstruct\$4 or construct\$3) near4 (implant\$3 or patch\$3 or annuloplasty or suture\$3 or balloon\$2 or shaper\$3) same (image\$2 or pattern\$2)	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S27 2	1208	S270 and S271	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S27 3	110788	(generat\$4 or creat\$4 or develop\$4 or graph\$4 or sketch\$3 or design\$3 or craft\$3 or reconstruct\$4 or construct\$3 or manufactur\$3) near (implant\$3 or patch\$3 or annuloplasty or suture\$3 or balloon\$2 or shaper\$3 or valve\$3)	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S27 4	2585	S270 and S273	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S27 5	3014	(generat\$4 or creat\$4 or develop\$4 or graph\$4 or sketch\$3 or design\$3 or craft\$3 or reconstruct\$4 or construct\$3 or manufactur\$3) near (implant\$3 or patch\$3 or annuloplasty or suture\$3 or balloon\$2 or shaper\$3 or valve\$3) same (cardiac or heart or atri\$3 or ventricle\$2 or aort\$3)	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00

### EAST Search History (Prior Art)

S27 6	241	S270 and S275	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
----------	-----	---------------	---	----	-----	------------------

# EAST Search History (Prior Art)

S27 7	181	("20010007956"   "20020082689"   "20020095116"   "20020123802"   "20020151970"   "20020183838"   "20020183841"   "20030023300"   "20030023303"   "20030036795"   "20030055496"   "20030078654"   "20030083538"   "20030130730"   "20030130731"   "20030191527"   "20030220684"   "20030225453"   "20030233022"   "20040003819"   "20040030381"   "20040030382"   "20040034320"   "20040039442"   "20040093060"   "20040127979"   "20040148019"   "20040148020"   "20040167620"   "20040186563"   "20040210304"   "20040225354"   "20040249413"   "20040249452"   "20040254600"   "20040260322"   "20040260390"   "20050010285"   "20050021056"   "20050021057"   "20050033446"   "20050055082"   "20050065550"   "20050107810"   "20050137686"   "20050137687"   "20050137688"   "20050137689"   "20050137690"   "20050137691"   "20050137695"   "20050137696"   "20050137699"   "20050137701"   "20050203549"   "20050203614"   "20050209674"   "20050222488"   "20050222489"   "20050228422"   "20050267574"   "20050273160"   "20060004442"   "20060020327"   "20060020332"   "20060020333"   "20060020334"   "20060025750"   "20060025787"   "20060025854"   "20060025855"   "20060041306"   "20060063970"   "20060074485"   "20060100699"   "20060106449"   "20060106450"   "20060129025"   "20060129051"   "20060129235"   "20060149135"   "20060178700"   "20060190030"   "20060229717"   "20060235512"   "20060241656"   "20060252984"   "20060271172"   "20070005133"   "20070027536"   "20070038293"   "20070043435"   "20070050022") .PN. OR ("20070185566" "20080015687"   "20080109073" "3416562"   "3657744"   "3671979" "3714671"   "4035849"   "4056854" "4183102"   "4339831"   "4592340" "4612011"   "4662885"   "4727873" "4787899"   "4817600"   "4892541" "4960424"   "4994077"   "5026383" "5032128"   "5163897"   "5163953" "5207695"   "5360444"   "5370685" "5370691"   "5397351"   "54111552" "5423851"   "5443499"   "5449385" "5500016"   "5554185"   "5564907" "5690570"   "5840081"   "5848964" "584964"	US-PGPUB; OR USPAT; USOCR	OFF	2008/12/08 04:00
----------	-----	--	---------------------------------	-----	------------------

## EAST Search History (Prior Art)

S27 8	142536	((mri or (magnetic near resonance)) or (CT or (computed near tomograph\$4)))) and image\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S27 9	14	S277 and S278	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S28 0	2	"7333643"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S28 1	45	"5151856"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S28 2	2	("20020007294").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S28 3	24	"5612885"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S28 4	275	heart same valve\$2 near\$4 size\$2 and shape\$3 and (xray or MRI or CT or cardiogram\$3 or ultrasound\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S28 5	33	"6893392"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00



## EAST Search History (Prior Art)

S28 6	1	"10800433"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:00
S28 7	262	mitral same regurgitation and (velocity or speed) same (fluid or blood)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:12
S28 8	214	mitral same regurgitation and (velocity or speed) same (fluid or blood) and volume	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:13
S28 9	139	mitral same regurgitation and (velocity or speed) same (fluid or blood) and volume and aorta	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:13
S29 0	764	albert near davis	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:36
S29 1	59	albert near davis and heart	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:36
S29 2	12	albert near davis and heart and modification	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 04:37
S29 3	46	suresh near mitta	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 05:03

## EAST Search History (Prior Art)

S29 4	106	gregory near murphy	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/12/08 05:14
S29 5	50	"5803914"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S29 6	972	heart and contrast and (LV or (left near ventricle)) and endocardial and epicardial	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S29 7	463	heart and contrast and (LV or (left near ventricle)) and endocardial and epicardial and image\$2	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S29 8	89	heart and contrast and (LV or (left near ventricle)) and endocardial and epicardial and image\$2 and (divid\$3 or partition\$3 or section\$3) near5 image\$2	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S29 9	82	heart and contrast and (LV or (left near ventricle)) and endocardial and epicardial and image\$2 and myocardium and (divid\$3 or partition\$3 or section\$3) near5 image\$2	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S30 0	32	heart and ((contrast or color\$3) near (differ\$4 or compar\$4)) and (LV or (left near ventricle)) and endocardial and epicardial and image\$2 and myocardium and (divid\$3 or partition\$3 or section\$3) near5 image\$2	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S30 1	57	heart and ((contrast or color\$3) near (differ\$4 or compar\$4)) and (LV or (left near ventricle)) and endocardial and epicardial and image\$2 and myocardium and tissue\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22

## EAST Search History (Prior Art)

S30 2	2	"20020131628"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S30 3	1	"10800433"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S30 4	1892	patch\$3 and sutur\$3 and valve\$2 and shap\$3 and ring	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S30 5	1561	patch\$3 and sutur\$3 and valve\$2 and shap\$3 and ring and heart\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S30 6	967	patch\$3 and sutur\$3 and valve\$2 and shap\$3 and ring and heart\$3 and balloon	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S30 7	986	patch\$3 and sutur\$3 and valve\$2 and shap\$3 and ring and heart\$3 and balloon\$2	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S30 8	80	patch\$3 and sutur\$3 and valve\$2 and shap\$3 and ring and heart\$3 and balloon\$2 and cad	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22

# EAST Search History (Prior Art)

S30 9	118	("20010012913"   "20010029333"   "20010031919"   "20010036245"   "20020016541"   "20020031204"   "20020032377"   "20020035321"   "20020042566"   "20020070970"   "20020077540"   "20020077541"   "20020082498"   "20020087075"   "20020095313"   "20020127523"   "20020167533"   "20030000535"   "20030018251"   "20030038802"   "20030069494"   "20030078494"   "20030095697"   "20030114750"   "20030187362"   "20040049115"   "20040049116"   "20040153128"   "20040176678"   "20040176679"   "20050043609"   "4436684"   "5072384"   "5151856"   "5235510"   "5239591"   "5273038"   "5319551"   "5360006"   "5375156"   "5433199"   "5435310"   "5450850"   "5509084"   "5533085"   "5559901"   "5570430"   "5601084"   "5633951"   "5684398"   "5687737"   "5704791"   "5734739"   "5755577"   "5757877"   "5779634"   "5791908"   "5800177"   "5800178"   "5807256"   "5817022"   "5839440"   "5889524"   "5892515"   "5902239"   "5920660"   "5923770"   "5947899"   "5954648"   "5963211"   "6024705"   "6045512"   "6047090"   "6106466"   "6185447"   "6190320"   "6201165"   "6205349"   "6205411"   "6230048"   "6241699"   "6268730"   "6298112"   "6315735"   "6346940"   "6366684"   "6373920"   "6415048"   "6421565"   "6438403"   "6442417"   "6445183"   "6447453"   "6447454"   "6454712"   "6454776"   "6468218"   "6470070"   "6473488"   "6473634"   "6482146"   "6487432"   "6493571"   "6496560"   "6510337"   "6522324"   "6526307"   "6535623"   "6545678"   "6557558"   "6559641"   "6563941"   "6573717"   "6574304".PN. OR ("6587541"   "6608916"   "6608917"   "6628743").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2009/08/14 12:22
S31 0	494	patch\$3 and sutur\$3 and valve\$2 and shap\$3 and ring and heart\$3 and balloon\$2 and image\$2	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22

## EAST Search History (Prior Art)

S31 1	183095	patch\$3 and sutur\$3 and valve\$2 and shap\$3 and ring and heart\$3 and balloon\$2 and image\$2 reconstruct\$5	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S31 2	195	patch\$3 and sutur\$3 and valve\$2 and shap\$3 and ring and heart\$3 and balloon\$2 and image\$2 and reconstruct\$5	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S31 3	16	implant near image\$2 and heart	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S31 4	279	implant near4 (image\$2 or pattern\$2) and heart	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S31 5	19	(generat\$4 or creat\$4 or develop\$4 or graph\$4 or sketch\$3) near4 implant near4 (image\$2 or pattern\$2) and heart	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S31 6	36	(generat\$4 or creat\$4 or develop\$4 or graph\$4 or sketch\$3 or design\$3 or craft\$3 or reconstruct\$4 or construct\$3) near4 implant near4 (image\$2 or pattern\$2) and heart	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S31 7	126	(generat\$4 or creat\$4 or develop\$4 or graph\$4 or sketch\$3 or design\$3 or craft\$3 or reconstruct\$4 or construct\$3) near4 implant same (image\$2 or pattern\$2) and heart	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S31 8	1673	(generat\$4 or creat\$4 or develop\$4 or graph\$4 or sketch\$3 or design\$3 or craft\$3 or reconstruct\$4 or construct\$3) near4 (implant\$3 or patch\$3 or annuloplasty or suture\$3 or balloon\$2 or shaper\$3 or guid\$3) same (image\$2 or pattern\$2) and heart	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22

## EAST Search History (Prior Art)

S31 9	501	(generat\$4 or creat\$4 or develop\$4 or graph\$4 or sketch\$3 or design\$3 or craft\$3 or reconstruct\$4 or construct\$3) near (implant\$3 or patch\$3 or annuloplasty or suture\$3 or balloon\$2 or shaper\$3 or guid\$3) same (image\$2 or pattern\$2) and heart	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S32 0	94	(generat\$4 or creat\$4 or develop\$4 or graph\$4 or sketch\$3 or design\$3 or craft\$3 or reconstruct\$4 or construct\$3) same patient near (implant\$3 or patch\$3 or annuloplasty or suture\$3 or balloon\$2 or shaper\$3 or guid\$3) same (image\$2 or pattern\$2) and heart	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S32 1	14	"6345200"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S32 2	1	("5709711").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2009/08/14 12:22
S32 3	25	patient same specific same simulation same heart same model\$2	US-PGPUB; USPAT; USOCR	OR	OFF	2009/08/14 12:22
S32 4	3	patient same specific same implant\$2 and simulation same heart same model\$2	US-PGPUB; USPAT; USOCR	OR	OFF	2009/08/14 12:22
S32 5	83	implant\$2 and simulation same heart same model\$2	US-PGPUB; USPAT; USOCR	OR	OFF	2009/08/14 12:22
S32 6	60	simulation same heart near model\$2	US-PGPUB; USPAT; USOCR	OR	OFF	2009/08/14 12:22
S32 7	111	simulat\$4 same heart near model\$2	US-PGPUB; USPAT; USOCR	OR	OFF	2009/08/14 12:22
S32 8	29	simulat\$4 and implant\$4 same heart near model\$2	US-PGPUB; USPAT; USOCR	OR	OFF	2009/08/14 12:22
S32 9	4297	computer\$5 near aid\$3 near\$4 (design\$4 or reconstruct\$4 or construct\$3) and (implant\$3 or patch\$3 or annuloplast\$4 or valve\$2 or shaper\$3 or balloon)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22

# EAST Search History (Prior Art)

S33 0	432	computer\$5 near aid\$3 near4 (design\$4 or reconstruct\$4 or construct\$3) same(implant\$3 or patch\$3 or annuloplast\$4 or valve\$2 or shaper\$3 or balloon)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S33 1	48	computer\$5 near aid\$3 near4 (design\$4 or reconstruct\$4 or construct\$3) same(implant\$3 or patch\$3 or annuloplast\$4 or valve\$2 or shaper\$3 or balloon) and (cardiac or heart)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S33 2	5	("20020119177"   "20030113301"   "20030180266"   "3855196"   "6659995").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2009/08/14 12:22
S33 3	12	("20010033857"   "20020182241"   "5227979"   "5680317"   "5762125"   "6013853"   "6143293"   "6192327"   "6233499"   "6306424"   "6365149"   "6534084").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2009/08/14 12:22
S33 4	1721	434/262-272.ccls.	US-PGPUB; USPAT; USOCR	OR	OFF	2009/08/14 12:22
S33 5	513	434/262-272.ccls. and (cardiac or heart)	US-PGPUB; USPAT; USOCR	OR	OFF	2009/08/14 12:22
S33 6	64	434/262-272.ccls. and (cardiac or heart) and patient near specific	US-PGPUB; USPAT; USOCR	OR	OFF	2009/08/14 12:22
S33 7	68	434/262-272.ccls. and (cardiac or heart) and patient\$2 near specific	US-PGPUB; USPAT; USOCR	OR	OFF	2009/08/14 12:22
S33 8	26	("20010047251"   "4918620"   "5099846"   "5155435"   "5208768"   "5297054"   "5298115"   "5487012"   "5522402"   "5552995"   "5683243"   "5704791"   "5741215"   "5754738"   "5768134"   "5771310"   "5797849"   "5824085"   "5871018"   "6038488"   "6106301"   "6112109"   "6205411"   "6315553"   "6327491"   "6463351").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2009/08/14 12:22
S33 9	15591	703/1-28.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22

## EAST Search History (Prior Art)

S34 0	91692	(heart or cardiac) and (implant\$3 or (medical near (instrument\$3 or device\$2)))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S34 1	15591	703/1-28.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S34 2	79	S340 and S341	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S34 3	1946	customiz\$5 same implant\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S34 4	15591	703/1-28.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S34 5	1946	customiz\$5 same implant\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S34 6	14	S344 and S345	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S34 7	0	paladin near medical	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22



## EAST Search History (Prior Art)

S34 8	191	paladin	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S34 9	4772	(custom or customiz\$5) same (implant\$3 or (medical near (device\$2 or instrument\$2)))	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S35 0	6880	382/128-132.ccls.	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S35 1	31	S349 and S350	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S35 2	11309	(custom or customiz\$5) same (implant\$3 or (medical near (device\$2 or instrument\$2)) or valve\$2 or stent\$2 or patch\$3 or baloon\$3)	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S35 3	46	S350 and S352	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S35 4	988	(custom or customiz\$5) near (implant\$3 or (medical near (device\$2 or instrument\$2)) or valve\$2 or stent\$2 or patch\$3 or baloon\$3)	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S35 5	133	(custom or customiz\$5) near (implant\$3 or (medical near (device\$2 or instrument\$2)) or valve\$2 or stent\$2 or patch\$3 or baloon\$3) and cardiac	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22

## EAST Search History (Prior Art)

S35 6	255	(custom or customiz\$5) same implant\$3 same ((medical near (device\$2 or instrument\$2)) or valve\$2 or stent\$2 or patch\$3 or baloon\$3) and cardiac	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S35 7	345	(custom or customiz\$5) same implant\$3 same ((medical near (device\$2 or instrument\$2)) or valve\$2 or stent\$2 or patch\$3 or baloon\$3) and (cardiac or heart or ventricle\$2 or atria or atrium)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S35 8	853	(custom or customiz\$5 or reconstruct\$3) same implant\$3 same ((medical near (device\$2 or instrument\$2)) or valve\$2 or stent\$2 or patch\$3 or baloon\$3) and (cardiac or heart or ventricle\$2 or atria or atrium)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S35 9	44	(custom or customiz\$5 or reconstruct\$3) same implant\$3 same ((medical near (device\$2 or instrument\$2)) or valve\$2 or stent\$2 or patch\$3 or baloon\$3) and simulation and (cardiac or heart or ventricle\$2 or atria or atrium)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S36 0	32	(custom or customiz\$5 or reconstruct\$3) same implant\$3 same ((medical near (device\$2 or instrument\$2)) or valve\$2 or stent\$2 or patch\$3 or baloon\$3) and simulation same (cardiac or heart or ventricle\$2 or atria or atrium)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S36 1	143	helix near medical	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S36 2	12	jarvick	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S36 3	1400	jarvik	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22

## EAST Search History (Prior Art)

S36 4	758	jarvik and heart	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S36 5	11309	(custom or customiz\$5) same (implant\$3 or (medical near (device\$2 or instrument\$2)) or valve\$2 or stent\$2 or patch\$3 or baloon\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S36 6	31	S363 and S365	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S36 7	3818	(design\$3 or manufactur\$3) same (custom or customiz\$5) same (implant\$3 or (medical near (device\$2 or instrument\$2)) or valve\$2 or stent\$2 or patch\$3 or baloon\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S36 8	764	(design\$3 or manufactur\$3) same (custom or customiz\$5) same patient\$2 same specific\$2	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S36 9	6880	382/128-132.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S37 0	10	S368 and S369	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S37 1	422	(design\$3 or manufactur\$3) same (custom or customiz\$5) same patient\$2 near4 specific\$2	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22

# EAST Search History (Prior Art)

S37 2	136	623/1.26.ccls.	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S37 3	3837	(design\$3 or manufactur\$3) same patient\$2 near4 specific\$2	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S37 4	6880	382/128-132.ccls.	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S37 5	40	S373 and S374	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S37 6	1229	623/900-904.ccls.	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S37 7	6880	382/128-132.ccls.	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S37 8	3	S376 and S377	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S37 9	3837	(design\$3 or manufactur\$3) same patient\$2 near4 specific\$2	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22

# EAST Search History (Prior Art)

S38 0	13		S376 and S379	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S38 1	24	("4097935"   "4436684"   "4575805"   "4822365"   "4936862"   "4976737"   "5360446"   "5365996"   "5370692"   "5432703"   "5448489"   "5452407"   "5554190"   "5687305"   "5741215"   "5765561"   "5769092"   "5798924"   "5824085"   "5824111"   "6112109"   "6254639"   "6334853"   "6463351").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2009/08/14 12:22	
S38 2	40		S377 and S379	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S38 3	55	("4286852"   "4294544"   "4508452"   "4575805"   "4616121"   "4745469"   "4837732"   "4935635"   "5011405"   "5027281"   "5028799"   "5098426"   "5131844"   "5214686"   "5238404"   "5243665"   "5347454"   "5368478"   "5395238"   "5424836"   "5431562"   "5447432"   "5454717"   "5456600"   "5464349"   "5474448"   "5513276"   "5518397"   "5533895"   "5542842"   "5604817"   "5618176"   "5715166"   "5724435"   "5742294"   "5823778"   "5848115"   "5880961"   "5886775"   "5985495"   "5988862"   "5991437"   "6088695"   "6100862"   "6100893"   "6124934"   "6139499"   "6167151"   "6201546"   "6205716"   "6211506"   "6217334"   "6227850"   "6253164"   "RE35816").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2009/08/14 12:22	
S38 4	4297	computer\$5 near aid\$3 near4 (design\$4 or reconstruct\$4 or construct\$3) and (implant\$3 or patch\$3 or annuloplast\$4 or valve\$2 or shaper\$3 or balloon)		US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S38 5	36		S377 and S384	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22

# EAST Search History (Prior Art)

S38 6	234	implant\$3 same ((medical near (device\$2 or instrument\$2)) or valve\$2 or stent\$2 or patch\$3 or balloon\$3) and simulation same (cardiac or heart or ventricle\$2 or atria or atrium)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S38 7	856	(implant\$3 or (medical near (device\$2 or instrument\$2)) or valve\$2 or stent\$2 or patch\$3 or balloon\$3) and simulation same (cardiac or heart or ventricle\$2 or atria or atrium)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S38 8	12	S377 and S387	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S38 9	67280	(implant\$3 or (medical near (device\$2 or instrument\$2)) or valve\$2 or stent\$2 or patch\$3 or balloon\$3) same (cardiac or heart or ventricle\$2 or atria or atrium)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S39 0	6880	382/128-132.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S39 1	203	S389 and S390	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S39 2	2	"20030023266"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S39 3	6	"09428008"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22

## EAST Search History (Prior Art)

S39 4	4	"10094730"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S39 5	37418	378/1-210.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S39 6	1561	patch\$3 and sutur\$3 and valve\$2 and shap\$3 and ring and heart\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S39 7	4	S395 and S396	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S39 8	16	implant near image\$2 and heart	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S39 9	0	S395 and S398	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S40 0	23229	(generat\$4 or creat\$4 or develop\$4 or graph\$4 or sketch\$3 or design\$3 or craft\$3 or reconstruct\$4 or construct\$3) near\$4 (implant\$3 or patch\$3 or annuloplasty or suture\$3 or balloon\$2 or shaper\$3 or guid\$3) same (image\$2 or pattern\$2)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S40 1	240	S395 and S400	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22

## EAST Search History (Prior Art)

S40 2	8976	(generat\$4 or creat\$4 or develop\$4 or graph\$4 or sketch\$3 or design\$3 or craft\$3 or reconstruct\$4 or construct\$3) near4 (implant\$3 or patch\$3 or annuloplasty or suture\$3 or balloon\$2 or shaper\$3) same (image\$2 or pattern\$2)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S40 3	83	S395 and S402	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S40 4	2	"09828504"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S40 5	2	"20020007294"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S40 6	2	"20070150052"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S40 7	47	albert near4 santilli	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S40 8	38	"5326371"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S40 9	444	prosthetic\$2 same heart same valves and (xray or MRI or CT)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22



## EAST Search History (Prior Art)

S41 0	618	prosthetic\$2 same heart same (valve\$2 or implant\$3) and (xray or MRI or CT)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S41 1	45	prosthetic\$2 same heart same (valve\$2 or implant\$3) and (xray or MRI or CT) and CAD	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S41 2	505	prosthetic\$2 same heart same (valve\$2 or implant\$3) and (xray or MRI or CT) and design\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S41 3	290	prosthetic\$2 same heart same (valve\$2 or implant\$3) and (xray or MRI or CT) and design\$3 and imag\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S41 4	2674	james near4 anderson	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S41 5	167	james near4 anderson and medical	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S41 6	106	james near4 anderson and medical and patient	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S41 7	801	(design\$3 or manufactur\$3 or simulat\$3) same (heart or cardiac or ventric\$5 or atri\$5) same (valve\$2 or implant\$3) and (xray or MRI or CT) and design\$3 and imag\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S41 8	12	("20010033857"   "20020182241"   "5227979"   "5680317"   "5762125"   "6013853"   "6143293"   "6192327"   "6233499"   "6306424"   "6365149"   "6534084").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2009/08/14 12:22

## EAST Search History (Prior Art)

S41 9	8	3di near2 gmbh	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S42 0	726178	((mri or (magnetic near resonance)) or (CT or (computed near tomograph\$4))))	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S42 1	153778	((mri or (magnetic near resonance)) or (CT or (computed near tomograph\$4)))) and image\$3	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S42 2	8976	(generat\$4 or creat\$4 or develop\$4 or graph\$4 or sketch\$3 or design\$3 or craft\$3 or reconstruct\$4 or construct\$3) near4 (implant\$3 or patch\$3 or annuloplasty or suture\$3 or balloon\$2 or shaper\$3) same (image\$2 or pattern\$2)	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S42 3	1345	S421 and S422	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S42 4	115289	(generat\$4 or creat\$4 or develop\$4 or graph\$4 or sketch\$3 or design\$3 or craft\$3 or reconstruct\$4 or construct\$3 or manufactur\$3) near (implant\$3 or patch\$3 or annuloplasty or suture\$3 or balloon\$2 or shaper\$3 or valve\$3)	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S42 5	2870	S421 and S424	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S42 6	3224	(generat\$4 or creat\$4 or develop\$4 or graph\$4 or sketch\$3 or design\$3 or craft\$3 or reconstruct\$4 or construct\$3 or manufactur\$3) near (implant\$3 or patch\$3 or annuloplasty or suture\$3 or balloon\$2 or shaper\$3 or valve\$3) same (cardiac or heart or atri\$3 or ventricle\$2 or aort\$3)	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22

### EAST Search History (Prior Art)

S42 7	275	S421 and S426	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
----------	-----	---------------	---	----	-----	------------------

# EAST Search History (Prior Art)

S42 8	181	("20010007956"   "20020082689"   "20020095116"   "20020123802"   "20020151970"   "20020183838"   "20020183841"   "20030023300"   "20030023303"   "20030036795"   "20030055496"   "20030078654"   "20030083538"   "20030130730"   "20030130731"   "20030191527"   "20030220684"   "20030225453"   "20030233022"   "20040003819"   "20040030381"   "20040030382"   "20040034320"   "20040039442"   "20040093060"   "20040127979"   "20040148019"   "20040148020"   "20040167620"   "20040186563"   "20040210304"   "20040225354"   "20040249413"   "20040249452"   "20040254600"   "20040260322"   "20040260390"   "20050010285"   "20050021056"   "20050021057"   "20050033446"   "20050055082"   "20050065550"   "20050107810"   "20050137686"   "20050137687"   "20050137688"   "20050137689"   "20050137690"   "20050137691"   "20050137695"   "20050137696"   "20050137699"   "20050137701"   "20050203549"   "20050203614"   "20050209674"   "20050222488"   "20050222489"   "20050228422"   "20050267574"   "20050273160"   "20060004442"   "20060020327"   "20060020332"   "20060020333"   "20060020334"   "20060025750"   "20060025787"   "20060025854"   "20060025855"   "20060041306"   "20060063970"   "20060074485"   "20060100699"   "20060106449"   "20060106450"   "20060129025"   "20060129051"   "20060129235"   "20060149135"   "20060178700"   "20060190030"   "20060229717"   "20060235512"   "20060241656"   "20060252984"   "20060271172"   "20070005133"   "20070027536"   "20070038293"   "20070043435"   "20070050022") .PN. OR ("20070185566"   "20080015687"   "20080109073"   "3416562"   "3657744"   "3671979"   "3714671"   "4035849"   "4056854"   "4183102"   "4339831"   "4592340"   "4612011"   "4662885"   "4727873"   "4787899"   "4817600"   "4892541"   "4960424"   "4994077"   "5026383"   "5032128"   "5163897"   "5163953"   "5207695"   "5360444"   "5370685"   "5370691"   "5397351"   "54111552"   "5423851"   "5443499"   "5449385"   "5500016"   "5554185"   "5649979"   "5690570"   "5840081"   "5848964"	US-PGPUB; OR USPAT; USOCR	OFF	2009/08/14 12:22
----------	-----	--	---------------------------------	-----	------------------

## EAST Search History (Prior Art)

S429	153778	((mri or (magnetic near resonance)) or (CT or (computed near tomograph\$4)))) and image\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S430	14	S428 and S429	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S431	4	"7333643"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S432	48	"5151856"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S433	2	("20020007294").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S434	25	"5612885"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S435	306	heart same valve\$2 near\$2 size\$2 and shape\$3 and (xray or MRI or CT or cardiogram\$3 or ultrasound\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S436	35	"6893392"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22

## EAST Search History (Prior Art)

S43 7	1	"10800433"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S43 8	50	"5803914"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S43 9	972	heart and contrast and (LV or (left near ventricle)) and endocardial and epicardial	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S44 0	463	heart and contrast and (LV or (left near ventricle)) and endocardial and epicardial and image\$2	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S44 1	89	heart and contrast and (LV or (left near ventricle)) and endocardial and epicardial and image\$2 and (divid\$3 or partition\$3 or section\$3) near5 image\$2	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S44 2	82	heart and contrast and (LV or (left near ventricle)) and endocardial and epicardial and image\$2 and myocardium and (divid\$3 or partition\$3 or section\$3) near5 image\$2	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S44 3	32	heart and ((contrast or color\$3) near (differ\$4 or compar\$4)) and (LV or (left near ventricle)) and endocardial and epicardial and image\$2 and myocardium and (divid\$3 or partition\$3 or section\$3) near5 image\$2	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S44 4	57	heart and ((contrast or color\$3) near (differ\$4 or compar\$4)) and (LV or (left near ventricle)) and endocardial and epicardial and image\$2 and myocardium and tissue\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22

## EAST Search History (Prior Art)

S44 5	2	"20020131628"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S44 6	1	"10800433"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S44 7	1892	patch\$3 and sutur\$3 and valve\$2 and shap\$3 and ring	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S44 8	1561	patch\$3 and sutur\$3 and valve\$2 and shap\$3 and ring and heart\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S44 9	967	patch\$3 and sutur\$3 and valve\$2 and shap\$3 and ring and heart\$3 and balloon	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S45 0	986	patch\$3 and sutur\$3 and valve\$2 and shap\$3 and ring and heart\$3 and balloon\$2	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S45 1	80	patch\$3 and sutur\$3 and valve\$2 and shap\$3 and ring and heart\$3 and balloon\$2 and cad	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22

# EAST Search History (Prior Art)

S45 2	118	("20010012913"   "20010029333"   "20010031919"   "20010036245"   "20020016541"   "20020031204"   "20020032377"   "20020035321"   "20020042566"   "20020070970"   "20020077540"   "20020077541"   "20020082498"   "20020087075"   "20020095313"   "20020127523"   "20020167533"   "20030000535"   "20030018251"   "20030038802"   "20030069494"   "20030078494"   "20030095697"   "20030114750"   "20030187362"   "20040049115"   "20040049116"   "20040153128"   "20040176678"   "20040176679"   "20050043609"   "4436684"   "5072384"   "5151856"   "5235510"   "5239591"   "5273038"   "5319551"   "5360006"   "5375156"   "5433199"   "5435310"   "5450850"   "5509084"   "5533085"   "5559901"   "5570430"   "5601084"   "5633951"   "5684398"   "5687737"   "5704791"   "5734739"   "5755577"   "5757877"   "5779634"   "5791908"   "5800177"   "5800178"   "5807256"   "5817022"   "5839440"   "5889524"   "5892515"   "5902239"   "5920660"   "5923770"   "5947899"   "5954648"   "5963211"   "6024705"   "6045512"   "6047090"   "6106466"   "6185447"   "6190320"   "6201165"   "6205349"   "6205411"   "6230048"   "6241699"   "6268730"   "6298112"   "6315735"   "6346940"   "6366684"   "6373920"   "6415048"   "6421565"   "6438403"   "6442417"   "6445183"   "6447453"   "6447454"   "6454712"   "6454776"   "6468218"   "6470070"   "6473488"   "6473634"   "6482146"   "6487432"   "6493571"   "6496560"   "6510337"   "6522324"   "6526307"   "6535623"   "6545678"   "6557558"   "6559641"   "6563941"   "6573717"   "6574304".PN. OR ("6587541"   "6608916"   "6608917"   "6628743").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2009/08/14 12:22
S45 3	494	patch\$3 and sutur\$3 and valve\$2 and shap\$3 and ring and heart\$3 and balloon\$2 and image\$2	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22



## EAST Search History (Prior Art)

S45 4	183095	patch\$3 and sutur\$3 and valve\$2 and shap\$3 and ring and heart\$3 and balloon\$2 and image\$2 reconstruct\$5	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S45 5	195	patch\$3 and sutur\$3 and valve\$2 and shap\$3 and ring and heart\$3 and balloon\$2 and image\$2 and reconstruct\$5	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S45 6	16	implant near image\$2 and heart	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S45 7	279	implant near4 (image\$2 or pattern\$2) and heart	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S45 8	19	(generat\$4 or creat\$4 or develop\$4 or graph\$4 or sketch\$3) near4 implant near4 (image\$2 or pattern\$2) and heart	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S45 9	36	(generat\$4 or creat\$4 or develop\$4 or graph\$4 or sketch\$3 or design\$3 or craft\$3 or reconstruct\$4 or construct\$3) near4 implant near4 (image\$2 or pattern\$2) and heart	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S46 0	126	(generat\$4 or creat\$4 or develop\$4 or graph\$4 or sketch\$3 or design\$3 or craft\$3 or reconstruct\$4 or construct\$3) near4 implant same (image\$2 or pattern\$2) and heart	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S46 1	1673	(generat\$4 or creat\$4 or develop\$4 or graph\$4 or sketch\$3 or design\$3 or craft\$3 or reconstruct\$4 or construct\$3) near4 (implant\$3 or patch\$3 or annuloplasty or suture\$3 or balloon\$2 or shaper\$3 or guid\$3) same (image\$2 or pattern\$2) and heart	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22

## EAST Search History (Prior Art)

S46 2	501	(generat\$4 or creat\$4 or develop\$4 or graph\$4 or sketch\$3 or design\$3 or craft\$3 or reconstruct\$4 or construct\$3) near (implant\$3 or patch\$3 or annuloplasty or suture\$3 or balloon\$2 or shaper\$3 or guid\$3) same (image\$2 or pattern\$2) and heart	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S46 3	94	(generat\$4 or creat\$4 or develop\$4 or graph\$4 or sketch\$3 or design\$3 or craft\$3 or reconstruct\$4 or construct\$3) same patient near (implant\$3 or patch\$3 or annuloplasty or suture\$3 or balloon\$2 or shaper\$3 or guid\$3) same (image\$2 or pattern\$2) and heart	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S46 4	14	"6345200"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S46 5	1	("5709711").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2009/08/14 12:22
S46 6	25	patient same specific same simulation same heart same model\$2	US-PGPUB; USPAT; USOCR	OR	OFF	2009/08/14 12:22
S46 7	3	patient same specific same implant\$2 and simulation same heart same model\$2	US-PGPUB; USPAT; USOCR	OR	OFF	2009/08/14 12:22
S46 8	83	implant\$2 and simulation same heart same model\$2	US-PGPUB; USPAT; USOCR	OR	OFF	2009/08/14 12:22
S46 9	60	simulation same heart near model\$2	US-PGPUB; USPAT; USOCR	OR	OFF	2009/08/14 12:22
S47 0	111	simulat\$4 same heart near model\$2	US-PGPUB; USPAT; USOCR	OR	OFF	2009/08/14 12:22
S47 1	29	simulat\$4 and implant\$4 same heart near model\$2	US-PGPUB; USPAT; USOCR	OR	OFF	2009/08/14 12:22
S47 2	4297	computer\$5 near aid\$3 near\$4 (design\$4 or reconstruct\$4 or construct\$3) and (implant\$3 or patch\$3 or annuloplast\$4 or valve\$2 or shaper\$3 or balloon)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22

# EAST Search History (Prior Art)

S47 3	432	computer\$5 near aid\$3 near4 (design\$4 or reconstruct\$4 or construct\$3) same(implant\$3 or patch\$3 or annuloplast\$4 or valve\$2 or shaper\$3 or balloon)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S47 4	48	computer\$5 near aid\$3 near4 (design\$4 or reconstruct\$4 or construct\$3) same(implant\$3 or patch\$3 or annuloplast\$4 or valve\$2 or shaper\$3 or balloon) and (cardiac or heart)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S47 5	5	("20020119177"   "20030113301"   "20030180266"   "3855196"   "6659995").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2009/08/14 12:22
S47 6	12	("20010033857"   "20020182241"   "5227979"   "5680317"   "5762125"   "6013853"   "6143293"   "6192327"   "6233499"   "6306424"   "6365149"   "6534084").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2009/08/14 12:22
S47 7	1721	434/262-272.ccls.	US-PGPUB; USPAT; USOCR	OR	OFF	2009/08/14 12:22
S47 8	513	434/262-272.ccls. and (cardiac or heart)	US-PGPUB; USPAT; USOCR	OR	OFF	2009/08/14 12:22
S47 9	64	434/262-272.ccls. and (cardiac or heart) and patient near specific	US-PGPUB; USPAT; USOCR	OR	OFF	2009/08/14 12:22
S48 0	68	434/262-272.ccls. and (cardiac or heart) and patient\$2 near specific	US-PGPUB; USPAT; USOCR	OR	OFF	2009/08/14 12:22
S48 1	26	("20010047251"   "4918620"   "5099846"   "5155435"   "5208768"   "5297054"   "5298115"   "5487012"   "5522402"   "5552995"   "5683243"   "5704791"   "5741215"   "5754738"   "5768134"   "5771310"   "5797849"   "5824085"   "5871018"   "6038488"   "6106301"   "6112109"   "6205411"   "6315553"   "6327491"   "6463351").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2009/08/14 12:22
S48 2	15591	703/1-28.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22

## EAST Search History (Prior Art)

S48 3	91692	(heart or cardiac) and (implant\$3 or (medical near (instrument\$3 or device\$2)))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S48 4	15591	703/1-28.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S48 5	79	S483 and S484	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S48 6	1946	customiz\$5 same implant\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S48 7	15591	703/1-28.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S48 8	1946	customiz\$5 same implant\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S48 9	14	S487 and S488	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S49 0	0	paladin near medical	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22

# EAST Search History (Prior Art)

S49 1	191	paladin	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S49 2	4772	(custom or customiz\$5) same (implant\$3 or (medical near (device\$2 or instrument\$2)))	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S49 3	6880	382/128-132.ccls.	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S49 4	31	S492 and S493	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S49 5	11309	(custom or customiz\$5) same (implant\$3 or (medical near (device\$2 or instrument\$2)) or valve\$2 or stent\$2 or patch\$3 or baloon\$3)	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S49 6	46	S493 and S495	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S49 7	988	(custom or customiz\$5) near (implant\$3 or (medical near (device\$2 or instrument\$2)) or valve\$2 or stent\$2 or patch\$3 or baloon\$3)	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S49 8	133	(custom or customiz\$5) near (implant\$3 or (medical near (device\$2 or instrument\$2)) or valve\$2 or stent\$2 or patch\$3 or baloon\$3) and cardiac	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22

## EAST Search History (Prior Art)

S49 9	255	(custom or customiz\$5) same implant\$3 same ((medical near (device\$2 or instrument\$2)) or valve\$2 or stent\$2 or patch\$3 or baloon\$3) and cardiac	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S50 0	345	(custom or customiz\$5) same implant\$3 same ((medical near (device\$2 or instrument\$2)) or valve\$2 or stent\$2 or patch\$3 or baloon\$3) and (cardiac or heart or ventricle\$2 or atria or atrium)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S50 1	853	(custom or customiz\$5 or reconstruct\$3) same implant\$3 same ((medical near (device\$2 or instrument\$2)) or valve\$2 or stent\$2 or patch\$3 or baloon\$3) and (cardiac or heart or ventricle\$2 or atria or atrium)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S50 2	44	(custom or customiz\$5 or reconstruct\$3) same implant\$3 same ((medical near (device\$2 or instrument\$2)) or valve\$2 or stent\$2 or patch\$3 or baloon\$3) and simulation and (cardiac or heart or ventricle\$2 or atria or atrium)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S50 3	32	(custom or customiz\$5 or reconstruct\$3) same implant\$3 same ((medical near (device\$2 or instrument\$2)) or valve\$2 or stent\$2 or patch\$3 or baloon\$3) and simulation same (cardiac or heart or ventricle\$2 or atria or atrium)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S50 4	143	helix near medical	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S50 5	12	jarvick	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S50 6	1400	jarvik	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22

## EAST Search History (Prior Art)

S50 7	758	jarvik and heart	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S50 8	11309	(custom or customiz\$5) same (implant\$3 or (medical near (device\$2 or instrument\$2)) or valve\$2 or stent\$2 or patch\$3 or baloon\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S50 9	31	S506 and S508	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S51 0	3818	(design\$3 or manufactur\$3) same (custom or customiz\$5) same (implant\$3 or (medical near (device\$2 or instrument\$2)) or valve\$2 or stent\$2 or patch\$3 or baloon\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S51 1	764	(design\$3 or manufactur\$3) same (custom or customiz\$5) same patient\$2 same specific\$2	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S51 2	6880	382/128-132.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S51 3	10	S511 and S512	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S51 4	422	(design\$3 or manufactur\$3) same (custom or customiz\$5) same patient\$2 near4 specific\$2	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22

## EAST Search History (Prior Art)

S51 5	136	623/1.26.ccls.	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S51 6	3837	(design\$3 or manufactur\$3) same patient\$2 near4 specific\$2	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S51 7	6880	382/128-132.ccls.	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S51 8	40	S516 and S517	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S51 9	1229	623/900-904.ccls.	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S52 0	6880	382/128-132.ccls.	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S52 1	3	S519 and S520	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S52 2	3837	(design\$3 or manufactur\$3) same patient\$2 near4 specific\$2	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22



# EAST Search History (Prior Art)

S52 3	13		S519 and S522	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S52 4	24	("4097935"   "4436684"   "4575805"   "4822365"   "4936862"   "4976737"   "5360446"   "5365996"   "5370692"   "5432703"   "5448489"   "5452407"   "5554190"   "5687305"   "5741215"   "5765561"   "5769092"   "5798924"   "5824085"   "5824111"   "6112109"   "6254639"   "6334853"   "6463351").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2009/08/14 12:22	
S52 5	40		S520 and S522	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S52 6	55	("4286852"   "4294544"   "4508452"   "4575805"   "4616121"   "4745469"   "4837732"   "4935635"   "5011405"   "5027281"   "5028799"   "5098426"   "5131844"   "5214686"   "5238404"   "5243665"   "5347454"   "5368478"   "5395238"   "5424836"   "5431562"   "5447432"   "5454717"   "5456600"   "5464349"   "5474448"   "5513276"   "5518397"   "5533895"   "5542842"   "5604817"   "5618176"   "5715166"   "5724435"   "5742294"   "5823778"   "5848115"   "5880961"   "5886775"   "5985495"   "5988862"   "5991437"   "6088695"   "6100862"   "6100893"   "6124934"   "6139499"   "6167151"   "6201546"   "6205716"   "6211506"   "6217334"   "6227850"   "6253164"   "RE35816").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2009/08/14 12:22	
S52 7	4297	computer\$5 near aid\$3 near4 (design\$4 or reconstruct\$4 or construct\$3) and (implant\$3 or patch\$3 or annuloplast\$4 or valve\$2 or shaper\$3 or balloon)		US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S52 8	36		S520 and S527	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22

## EAST Search History (Prior Art)

S52 9	234	implant\$3 same ((medical near (device\$2 or instrument\$2)) or valve\$2 or stent\$2 or patch\$3 or balloon\$3) and simulation same (cardiac or heart or ventricle\$2 or atria or atrium)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S53 0	856	(implant\$3 or (medical near (device\$2 or instrument\$2)) or valve\$2 or stent\$2 or patch\$3 or balloon\$3) and simulation same (cardiac or heart or ventricle\$2 or atria or atrium)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S53 1	12	S520 and S530	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S53 2	67280	(implant\$3 or (medical near (device\$2 or instrument\$2)) or valve\$2 or stent\$2 or patch\$3 or balloon\$3) same (cardiac or heart or ventricle\$2 or atria or atrium)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S53 3	6880	382/128-132.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S53 4	203	S532 and S533	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S53 5	2	"20030023266"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S53 6	6	"09428008"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22

## EAST Search History (Prior Art)

S53 7	4	"10094730"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S53 8	37418	378/1-210.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S53 9	1561	patch\$3 and sutur\$3 and valve\$2 and shap\$3 and ring and heart\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S54 0	4	S538 and S539	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S54 1	16	implant near image\$2 and heart	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S54 2	0	S538 and S541	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S54 3	23229	(generat\$4 or creat\$4 or develop\$4 or graph\$4 or sketch\$3 or design\$3 or craft\$3 or reconstruct\$4 or construct\$3) near\$4 (implant\$3 or patch\$3 or annuloplasty or suture\$3 or balloon\$2 or shaper\$3 or guid\$3) same (image\$2 or pattern\$2)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S54 4	240	S538 and S543	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22

## EAST Search History (Prior Art)

S54 5	8976	(generat\$4 or creat\$4 or develop\$4 or graph\$4 or sketch\$3 or design\$3 or craft\$3 or reconstruct\$4 or construct\$3) near4 (implant\$3 or patch\$3 or annuloplasty or suture\$3 or balloon\$2 or shaper\$3) same (image\$2 or pattern\$2)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S54 6	83	S538 and S545	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S54 7	2	"09828504"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S54 8	2	"20020007294"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S54 9	2	"20070150052"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S55 0	47	albert near4 santilli	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S55 1	38	"5326371"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S55 2	444	prosthetic\$2 same heart same valves and (xray or MRI or CT)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22

## EAST Search History (Prior Art)

S55 3	618	prosthetic\$2 same heart same (valve\$2 or implant\$3) and (xray or MRI or CT)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S55 4	45	prosthetic\$2 same heart same (valve\$2 or implant\$3) and (xray or MRI or CT) and CAD	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S55 5	505	prosthetic\$2 same heart same (valve\$2 or implant\$3) and (xray or MRI or CT) and design\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S55 6	290	prosthetic\$2 same heart same (valve\$2 or implant\$3) and (xray or MRI or CT) and design\$3 and imag\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S55 7	2674	james near4 anderson	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S55 8	167	james near4 anderson and medical	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S55 9	106	james near4 anderson and medical and patient	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S56 0	801	(design\$3 or manufactur\$3 or simulat\$3) same (heart or cardiac or ventric\$5 or atri\$5) same (valve\$2 or implant\$3) and (xray or MRI or CT) and design\$3 and imag\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S56 1	12	("20010033857"   "20020182241"   "5227979"   "5680317"   "5762125"   "6013853"   "6143293"   "6192327"   "6233499"   "6306424"   "6365149"   "6534084").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2009/08/14 12:22

## EAST Search History (Prior Art)

S56 2	8	3di near2 gmbh	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S56 3	726178	((mri or (magnetic near resonance)) or (CT or (computed near tomograph\$4)))	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S56 4	153778	((mri or (magnetic near resonance)) or (CT or (computed near tomograph\$4))) and image\$3	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S56 5	8976	(generat\$4 or creat\$4 or develop\$4 or graph\$4 or sketch\$3 or design\$3 or craft\$3 or reconstruct\$4 or construct\$3) near4 (implant\$3 or patch\$3 or annuloplasty or suture\$3 or balloon\$2 or shaper\$3) same (image\$2 or pattern\$2)	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S56 6	1345	S564 and S565	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S56 7	115289	(generat\$4 or creat\$4 or develop\$4 or graph\$4 or sketch\$3 or design\$3 or craft\$3 or reconstruct\$4 or construct\$3 or manufactur\$3) near (implant\$3 or patch\$3 or annuloplasty or suture\$3 or balloon\$2 or shaper\$3 or valve\$3)	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S56 8	2870	S564 and S567	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S56 9	3224	(generat\$4 or creat\$4 or develop\$4 or graph\$4 or sketch\$3 or design\$3 or craft\$3 or reconstruct\$4 or construct\$3 or manufactur\$3) near (implant\$3 or patch\$3 or annuloplasty or suture\$3 or balloon\$2 or shaper\$3 or valve\$3) same (cardiac or heart or atri\$3 or ventricle\$2 or aort\$3)	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22

### EAST Search History (Prior Art)

S57 0	275	S564 and S569	US-PGPUB; USPAT; USOCR; EPO, JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
----------	-----	---------------	---	----	-----	------------------

# EAST Search History (Prior Art)

S57 1	181	("20010007956"   "20020082689"   "20020095116"   "20020123802"   "20020151970"   "20020183838"   "20020183841"   "20030023300"   "20030023303"   "20030036795"   "20030055496"   "20030078654"   "20030083538"   "20030130730"   "20030130731"   "20030191527"   "20030220684"   "20030225453"   "20030233022"   "20040003819"   "20040030381"   "20040030382"   "20040034320"   "20040039442"   "20040093060"   "20040127979"   "20040148019"   "20040148020"   "20040167620"   "20040186563"   "20040210304"   "20040225354"   "20040249413"   "20040249452"   "20040254600"   "20040260322"   "20040260390"   "20050010285"   "20050021056"   "20050021057"   "20050033446"   "20050055082"   "20050065550"   "20050107810"   "20050137686"   "20050137687"   "20050137688"   "20050137689"   "20050137690"   "20050137691"   "20050137695"   "20050137696"   "20050137699"   "20050137701"   "20050203549"   "20050203614"   "20050209674"   "20050222488"   "20050222489"   "20050228422"   "20050267574"   "20050273160"   "20060004442"   "20060020327"   "20060020332"   "20060020333"   "20060020334"   "20060025750"   "20060025787"   "20060025854"   "20060025855"   "20060041306"   "20060063970"   "20060074485"   "20060100699"   "20060106449"   "20060106450"   "20060129025"   "20060129051"   "20060129235"   "20060149135"   "20060178700"   "20060190030"   "20060229717"   "20060235512"   "20060241656"   "20060252984"   "20060271172"   "20070005133"   "20070027536"   "20070038293"   "20070043435"   "20070050022") .PN. OR ("20070185566" "20080015687"   "20080109073" "3416562"   "3657744"   "3671979" "3714671"   "4035849"   "4056854" "4183102"   "4339831"   "4592340" "4612011"   "4662885"   "4727873" "4787899"   "4817600"   "4892541" "4960424"   "4994077"   "5026383" "5032128"   "5163897"   "5163953" "5207695"   "5360444"   "5370685" "5370691"   "5397351"   "54111552" "5423851"   "5443499"   "5449385" "5500016"   "5554185"   "5649979" "5690570"   "5840081"   "5848964"	US-PGPUB; OR USPAT; USOCR	OFF	2009/08/14 12:22
----------	-----	--	---------------------------------	-----	------------------



## EAST Search History (Prior Art)

S57 2	153778	((mri or (magnetic near resonance)) or (CT or (computed near tomograph\$4)))) and image\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S57 3	14	S571 and S572	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S57 4	4	"7333643"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S57 5	48	"5151856"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S57 6	2	("20020007294").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S57 7	25	"5612885"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S57 8	306	heart same valve\$2 near4 size\$2 and shape\$3 and (xray or MRI or CT or cardiogram\$3 or ultrasound\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S57 9	35	"6893392"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22

## EAST Search History (Prior Art)

S58 0	1	"10800433"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S58 1	284	mitral same regurgitation and (velocity or speed) same (fluid or blood)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S58 2	232	mitral same regurgitation and (velocity or speed) same (fluid or blood) and volume	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S58 3	153	mitral same regurgitation and (velocity or speed) same (fluid or blood) and volume and aorta	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S58 4	770	albert near davis	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S58 5	62	albert near davis and heart	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S58 6	14	albert near davis and heart and modification	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
S58 7	50	suresh near mitta	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22

### EAST Search History (Prior Art)

S588	111	gregory near murphy	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/08/14 12:22
------	-----	---------------------	---	----	-----	------------------

### EAST Search History (Interference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S589	0	(heart and tissue\$2 and modification\$2 and blood and flow and velocity and aorta).dm.	USPAT; UPAD	OR	OFF	2009/08/15 12:41